

**To:** Jan Christner[jan.christner@westonsolutions.com]  
**From:** Way, Steven  
**Sent:** Wed 4/23/2014 12:06:14 PM  
**Subject:** Fw: American Tunnel Data  
[Sunnyside Seep WQ data final.pdf](#)  
[Sunnyside seep point location.pdf](#)  
[hydrosearch hydro characterization.pdf](#)

Jan - a little more data that may be useful. However, let's stay with the approach of a couple periods and see how the comparisons look.

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**From:** Sorrenson - DNR, Allen <allen.sorenson@state.co.us>  
**Sent:** Tuesday, April 22, 2014 6:33:40 PM  
**To:** Way, Steven  
**Subject:** Re: American Tunnel Data

Steve, I can help with the interpretation of the tables; it's late 1980's computer and printer technology. The sampling location "ATINFL" is American Tunnel Inflow to treatment plant (as I recall). There are three tables for this sample location. Table 1 is pages 12 thru 16 of the pdf; Table 2 is pages 17-21; Table 3 is page 22. At the top of each table are the mean, min, and max measured or calculated for each parameter in each table. So, American Tunnel flow ranges from 2.24 to 2.29 million gallons per day with an average of 2.273. But, if you scroll down through the table, you see that flow was only measured on two days, November 18, 1988 and April 1, 1991! Of more utility perhaps is the metals data, for example total zinc in Table 2 was measured dozens of times from 1987 to 1991, with a mean of 15.05 mg/L. There is significant additional American Tunnel flow data in the attached "hydrosearch hydro characterization" document.

Bear in mind that I'm trying to recall things from more than 20-years ago, but I remember CC-1 as being in Cement Creek above the American Tunnel outfall and another sample location CC-2 in Cement Creek below the American Tunnel outfall. The Hydrosearch report and appendices make it clear that CC-1 is above the American Tunnel. However, I'm confounded by the coordinates for CC-1 in the attached "Sunnyside\_seep point location" document, which put CC-1 below the American Tunnel; this has just got to be a mistake; Larry Perino would know.

Finally, attached is "Sunnyside\_Seep\_WQ\_data\_final" with lots of pre-bulkhead data. The sample site locations are to be taken from "Sunnyside\_seep point location" which we know has at least one error.

Have a safe trip, Allen

On Tue, Apr 22, 2014 at 1:03 PM, Way, Steven <[way.steven@epa.gov](mailto:way.steven@epa.gov)> wrote:

Allen this very helpful. I have two questions:

1. Is the flow data at the top of the first page of the table with the flow and chemistry for the Am Tunnel. It's not labeled at least as near as I could tell.
2. Where is CC 1 on the Cement Creek as show in the latter table for Cement Creek "above the mine". Sample locations have been renamed over the years. I am hoping the CC 1 in this report is down near the Am Tnnl ??
3. If there are other data for Cement Creek before plugging that you have this would be helpful.

I head to Silverton tomorrow back in next week.

Thanks again,

Steve

**From:** Sorrenson - DNR, Allen [mailto:[allen.sorenson@state.co.us](mailto:allen.sorenson@state.co.us)]  
**Sent:** Monday, April 21, 2014 2:50 PM  
**To:** Way, Steven  
**Subject:** American Tunnel Data

Steve, starting on page 11 of the attached document is pre-bulkhead water quality data for the American Tunnel untreated discharge. -Allen